

LANDFILL SLOPES: A SLIPPERY SLOPE FOR ENGINEERING DESIGN

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Regulatory agencies across the United States vary in their prescriptive design criteria for landfill cell construction and closure, specifically criteria address inside sideslopes, bottom slopes (longitudinally and laterally), outside slopes, and top slopes. For example, a prescriptive standard for closure may specify an allowable top slope between 2 and 5 %, or not less than 5 %. The outside sideslope may be constrained to no more than a 3:1 or 4:1 H:V requirement. Some slope criteria are worded prescriptively, but allow for a performance based demonstration of design. This provides the engineer with a modicum of freedom to do what engineers do best: engineer. This talk will briefly address some of the implications of prescriptive or performance based slope criteria in landfill design.